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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/707,907	01/23/2004	Michael Ben Sellers	139773	1906								
<div>7590      10/18/2007</div> <div>Philmore H. Colburn II Cantor Colburn LLP 55 Griffin Road South Bloomfield, CT 06002</div> <div>EXAMINER WEATHERBY, ELLSWORTH</div> <table border="1"><thead><tr><th>ART UNIT</th><th>PAPER NUMBER</th></tr></thead><tbody><tr><td>3768</td><td></td></tr></tbody></table> <table border="1"><thead><tr><th>MAIL DATE</th><th>DELIVERY MODE</th></tr></thead><tbody><tr><td>10/18/2007</td><td>PAPER</td></tr></tbody></table>					ART UNIT	PAPER NUMBER	3768		MAIL DATE	DELIVERY MODE	10/18/2007	PAPER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

mn

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,907	<b>Applicant(s)</b> SELLERS, MICHAEL BEN	
	<b>Examiner</b> Ellsworth Weatherby	<b>Art Unit</b> 3768	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8,12-15,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,12-15, 17-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-7, 12-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danby et al. (USPN 5,061,897) in view of Wang et al. (Pub. No. US 2004/0225213).

Danby et al. '897 teaches a gradient tube extending along an axis, the tube including first and second gradient coils, the conductive compound being a glue having a plurality of conductive particles therein, at least a portion of the plurality of conductive particles being in the range of 1-10 micrometers in diameter, the plurality of conductive particles configured to limit a current flowing through the conductive compound to less than 10 microamps to reduce electrostatic discharge in the glue. Danby et al. '897 also teaches using an epoxy resin (abstract; ref. 300; ref. 326).

Danby et al. '897 does not expressly teach that the silver, gold or copper particles are in the range of 1-10 micrometers in diameter. Danby et al. '897 also does

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not expressly teach using a polyester compound. Danby et al. '897 also does not expressly teach that the current is limited to less than 10 microamps.

Wang et al. teaches using an insulating layer comprising microparticles to limit current in a magnetic imaging system using silver, gold, or copper nanoparticles including the range of 2-20 micrometers [0082]. Wang et al. also teaches as known in the art using a polyester compound [0242].

Because Danby et al. '897 teaches a layer that is used to limit current, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Danby et al. '897 in view of Wang et al. '213. The motivation to modify Danby et al. '897 to limit the current to less than 10 microamps would have been to provide a highly sensitive system.

Claims 12-15 and 17-18 does not contain any feature which, alone or in combination with the features of any claim it refers meet the requirements of novelty and/or inventive step over claims 1-3 and 6-7. Therefore, the same reasoning from claims 1-3 and 6-7 applies mutatis mutandis to the subject matter of the corresponding claim

4. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danby et al. '897 in view of Wang et al. '213 as applied to claim 1 above, and further in view of Dietz et al. (USPN 6,642,717).

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Danby et al. '897 in view of Wang et al. '213 teaches all the limitations of the claimed invention except for expressly teaching that the conductive compound includes a chemical hardening compound.

In the same field of endeavor, Dietz et al. '717 teaches using a hardening compound in a plastic conductive compound (col. 3, l. 53- col. 4, l. 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Danby et al. '897 in view of Wang et al. '213 with Dietz et al. '897. The motivation to modify Danby et al. '897 in view of Wang et al. '213 with Dietz et al. '897 would have been to aid in casting or curing, as taught by Dietz et al. '897 (col. 3, l. 53- col. 4, l. 8).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Danby et al. '897 in view of Wang et al. '213 as applied to claim 2 above, and further in view of Lehne et al. (USPN 5,235,283).

Danby et al. '897 in view of Wang et al. '213 teaches all the limitations of the claimed invention except for expressly teaching that the epoxy resin comprises a bisphenol-A resin.

In the same field of endeavor, Lehne et al. '283 teaches using biphenol-a Aresin in an epoxy resin (col. 4, ll. 39-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Danby et al. '897 in view of Wang et al. '213 with Lehne et al. '283. The motivation to modify Danby et al. '897 in view of Wang et al. '213 with Lehne et al.

'283 would have been to aid in casting or curing, as taught by Lehne et al. '283 (col. 4, ll. 39-58).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellsworth Weatherby whose telephone number is (571) 272-2248. The examiner can normally be reached on M-F 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on (571) 272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EW

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